

Patent Application No. 10/755,716
Art. Unit: 2617
Amendments to the Claims
Dated November 3, 2009
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Amendments to the Claims

Listing of Claims

Claim 1. (Canceled).

Claim 2. (Canceled).

Claim 3. (Canceled).

Claim 4 (Canceled).

Claim 5 (Canceled).

Claim 6. (Canceled).

Claim 7 (Currently amended). A method for transmitting and receiving the data with low Bit Error Rate (BER) in the presence of interference between subscriber stations (SS), in a wireless communication, where in the presence of a group of more than two ~~Subscriber Stations (SS)~~ SS, transmission can take place between any one SS to another SS on one to one basis, comprising the steps of:

assigning to each SS its own ~~identification code~~ Unique Address Code (UAC),

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and its own Encoded Information Group (EIG), and also assigning to it two
frequencies f1 and f2 to transmit and receive data, where the UAC is represented
as a binary code, and the EIG is comprised of a sequence of regularly
interchanging "1" and "0" bits with different durations;

tuning the transmitter and receiver of the Subscriber Station A (SS A) to
the UAC and EIG of the Subscriber Station B (SS B) when SS A attempts to
connect to SS B;

tuning the SS A's receiver to frequencies f1 and f2, when the SS A
attempts to detect the availability of the UAC of the SS B in the incoming signal,
if the UAC of SS B is available, then SS B is considered to be busy;

blocking the SS A's own transmitter and receiver's registering device
at the SS A, to disable SS A receiving data from SS B, which is not
intended for SS A, and similarly to not transmit data to SS B, when SS B is busy;

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tuning the SS A's transmitter over to f_1 , and the SS A's receiver to f_2 ,
when SS B becomes free as detected by the absence of the SS B's UAC in
the incoming signal;

converting each "1" bit of data to be transmitted to the SS B into a SS B's
EIG at the SS A's transmitter;

framing and grouping the SS B's UAC and data at the SS A's transmitter,
in a sequence of successive frames, wherein the duration of each frame in
the signal is constant;

modulating the said frames on the frequency f_1 to initiate a wireless
communication using one of various types of modulation PSK or FSK, or ASK;

transmitting the said modulated frames by SS A's transmitter;

generating at the SS B's receiver an internal Reference Signal (RS) that
corresponds to the SS B's UAC, whereby such RS matches and is a copy of the
SS B's UAC, and therefore counting at the SS B's receiver the Number of

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Continuous Clock Rate Periods (NCCRP) that the RS continually matches
with the incoming signal;

synchronizing the SS B's receiver and transmitter with the SS A's
transmitter, when the number of NCCRP exceeds the Threshold Value of
Matches (TVM) number where the TVM number is pre-assigned in the
SS B's receiver;

measuring at the SS B's receiver the Voltage Hops of the level of the
incoming signal at the starting and ending points of the "0" and "1" bits of the
EIG, having established that the SS B's receiver and the SS A's transmitter are
synchronized and thereby the SS B's receiver knowing at what instances the
data bits are to be found, and accordingly;

recovering at the SS B's receiver the data transmitted by the SS A's
transmitter from measured values of Voltage Hops by following the rises and
drops that takes place at the start and end points of all the "0" and "1" bits in the

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received signal;

converting each "1" bit of data to be transmitted to the SS A into a SS B's

EIG at the SS B's transmitter;

framing and grouping the SS B's UAC and data in a sequence of
successive frames, wherein the duration of each frame in the signal is the
same as the SS A's frames durations;

modulating the said frames on the frequency f2 at the SS B's transmitter;

transmitting the said modulated frames by SS B's transmitter.

Claim 8 (Canceled).

Claim 9 (Canceled).

Claim 10 (Currently amended). The A- method for transmitting and receiving the
data, as claimed in claim 7, further comprising the steps of:

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measuring at the SS A's receiver the amount of the time delay of the
received UAC signal regarding UAC signal transmitted by SS A;

computing the distance between subscribers stations A and B from the said
measured amount of the time delay between UAC signals transmitted and received
by SS A.

Claim 11 (Currently amended). The ~~A~~ method for transmitting and receiving
the data, as claimed in claim 7, further comprising of:

transmitting simultaneously and intentionally a strong interference along
with the data, to maintain the security of the transmission, consequently
preserving the confidentiality of the transferred data.

Respectfully submitted,



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